COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

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In the Matter of:

THE APPLICATION OF THE ADAIR COUNTY WATER DISTRICT, A WATER DISTRICT ORGANIZED PURSUANT TO CHAPTER 74 OF THE KENTUCKY REVISED STATUTES, IN ADAIR COUNTY,) KENTUCKY, FOR (1) A CERTIFICATE OF) PUBLIC CONVENIENCE AND NECESSITY, AUTHORIZING AND PERMITTING SAID WATER DISTRICT TO CONSTRUCT WATER DISTRIBUTION SYSTEM IMPROVEMENTS, CONSISTING OF SEVENTY-SIX MILES OF) WATER TRANSMISSION LINES AND APPURTENANCES; (2) APPROVAL OF THE) PROPOSED PLAN OF FINANCING OF SAID) PROJECT; AND (3) APPROVAL OF INCREASED WATER RATES PROPOSED TO BE CHARGED BY THE DISTRICT TO ITS CUSTOMERS

CASE NO. 9518

ORDER

County") shall file an original and seven copies of the following information with the Commission with a copy to all parties of record within 2 weeks of the date of this Order. If the information requested or a motion for an extension of time is not filed by the stated date, the Commission may dismiss the case without prejudice. Adair County shall furnish with each response the name of the witness who will be available at the public hearing for responding to guestions concerning each item of information requested.

- 1. Provide hydraulic analyses, supported by computations and actual field measurements, of typical operational sequences of the existing water distribution system. These hydraulic analyses should demonstrate the operation of all pump stations and the "empty-fill" cycles of all water storage tanks. tations are to be documented by a labeled schematic map of the system that shows pipeline sizes, lengths, connections, pumps, water storage tanks, wells, and sea level elevations of key points, as well as allocations of actual customer demands. Flows used in the analyses shall be identified as to whether they are based on average instantaneous flows, peak instantaneous flows, or any combination or variation thereof. The flows used in the analysis shall be documented by actual field measurements and customer use records. Justify fully any assumptions used in the analyses.
- 2. Provide a summary of any operational deficiencies of the existing water system that are indicated by the hydraulic analyses or that are known from experience.
- 3. Provide hydraulic analyses, supported by computations and field measurements, demonstrating the appropriateness of the engineering design of the proposed construction of additions and extensions. Justify fully any assumptions used in the analyses.
- 4. Provide a pressure recording chart showing the actual 24-hour continuously measured pressure available on the City of Campbellsville's existing water line near the proposed connection

point of the water lines to serve the Highway 76 area in northern Adair County. Identify the 24-hour period recorded, the exact location of the pressure recorder and the sea level elevation of the recorder.

- 5. Provide a pressure recording chart showing the actual 24-hour continuously measured pressure available on Adair County's existing water line on Highway 80 in the vicinity of the proposed Wheets extension. Identify the 24-hour period recorded, the exact location of the pressure recorder and the sea level elevation of the recorder.
- 6. Provide a pressure recording chart showing the actual 24-hour continuously measured pressure available on Adair County's existing water line in the vicinity of the proposed Purdy-Neatsville Road extension. Identify the 24-hour period recorded, the exact location of the pressure recorder and the sea level elevation of the recorder.
- 7. Provide pressure recording charts showing the actual 24-hour continuously measured pressure available on Adair County's water lines at all existing connection points to the City of Columbia's water system. Identify the 24-hour periods recorded, the exact locations of the pressure recorders and the sea level elevations of the recorders.
- 8. Provide a pressure recording chart showing the actual 24-hour continuously measured pressure available on Adair County's water line in the vicinity of the connection point

proposed Highway 704 extension. Identify the 24-hour period recorded, the exact location of the pressure recorder and the sea level elevation of the recorder.

- 9. Provide a pressure recording chart showing the actual 24-hour continuously measured pressure available on Adair County's water line on Highway 55 in the vicinity of the proposed Highway 768 line extension. Identify the 24-hour period recorded, the exact location of the pressure recorder and the sea level elevation of the recorder.
- 10. Provide a pressure recording chart showing the actual 24-hour continuously measured pressure available on Adair County's water line on Highway 206 in the vicinity of the proposed Taylor Ford Road and Beulah Chapel Road extensions. Identify the 24-hour period recorded, the exact location of the pressure recorder and the sea level elevation of the recorder.
- 11. Provide a pressure recording chart showing the actual 24-hour continuously measured pressure available on Adair County's water line on Highway 61 in the vicinity of the proposed Toria Road extension. Identify the 24-hour period recorded, the exact location of the pressure recorder and the sea level elevation of the recorder.
- 12. Provide a pressure recording chart showing the actual 24-hour continuously measured pressure available on Adair County's water line on Highway 55 in the vicinity of the proposed

Highway 92 extension. Identify the 24-hour period recorded, the exact location of the pressure recorder and the sea level elevation of the recorder.

- 13. Provide a pressure recording chart showing the actual 24-hour continuously measured pressure available on Adair County's water line on Highway 61 in the vicinity of the proposed Highway 768 extension. Identify the 24-hour period recorded, the exact location of the pressure recorder and the sea level elevation of the recorder.
- 14. Provide a pressure recording chart showing the actual 24-hour continuously measured pressure available on Adair County's water line on Highway 768 in the vicinity of the proposed extension near Milltown. Identify the 24-hour period recorded, the exact location of the pressure recorder and the sea level elevation of the recorder.
- 15. Provide a pressure recording chart showing the actual 24-hour continuously measured pressure available on Adair County's water line on Highway 61 in the vicinity of Sulphur Springs Road. Identify the 24-hour period recorded, the exact location of the pressure recorder and the sea level elevation of the recorder.
- 16. Provide a pressure recording chart showing the actual 24-hour continuously measured pressure available on the City of Columbia's water line near the proposed connection point for the Highway 767 extension. Identify the 24-hour period recorded, the exact location of the pressure recorder and the sea level elevation of the recorder.

- 17. Provide a pressure recording chart showing the actual 24-hour continuously measured pressure available on Adair County's water line Highway 551 in the vicinity of the proposed extension near Hutchison Road. Identify the 24-hour period recorded, the exact location of the pressure recorder and the sea level elevation of the recorder.
- 18. Provide a pressure recording chart showing the actual 24-hour continuously measured pressure available on Adair County's water line on Old Highway 55 in the vicinity of the proposed Grant Road extension. Identify the 24-hour period recorded, the exact location of the pressure recorder and the sea level elevation of the recorder.
- 19. Provide a pressure recording chart showing the actual 24-hour continuously measured pressure available on Adair County's water line near the connection point for "Line 20". Identify the 24-hour period recorded, the exact location of the pressure recorder and the sea level elevation of the recorder.
- 20. Provide a pressure recording chart showing the actual 24-hour continuously measured pressure available on Adair County's water line on Highway 55 in the vicinity of McIntyre Road. Identify the 24-hour period recorded, the exact location of the pressure recorder and the sea level elevation of the recorder.
- 21. Provide a pressure recording chart showing the actual 24-hour continuously measured pressure available on the suction and discharge sides of Adair County's pump station on Highway 61

near Paxton Road. Identify the 24-hour period recorded, the exact location of the pressure recorder and the sea level elevation of the recorder.

- 22. Provide pressure recording charts showing the actual 24-hour continuously measured pressure available on the suction and discharge sides of Adair County's pump station on Highway 55. Identify the 24-hour period recorded, the exact location of the pressure recorder and the sea level elevation of the recorder.
- 23. Provide a pressure recording chart showing the actual 24-hour continuously measured pressure available on the suction and discharge sides of Adair County's existing pump station on Highway 61. Identify the 24-hour period recorded, the exact location of the pressure recorder and the sea level elevation of the recorder.
- 24. Provide a pressure recording chart showing the actual 24-hour continuously measured pressure available on the suction and discharge sides of Adair County's existing pump station on Highway 80. Identify the 24-hour period recorded, the exact location of the pressure recorder and the sea level elevation of the recorder.
- 25. Provide a pressure recording chart showing the actual 24-hour continuously measured pressure available on the suction and discharge sides of Adair County's existing pump station on Highway 206. Identify the 24-hour period recorded, the exact location of the pressure recorder and the sea level elevation of the recorder.

- 26. Provide a pressure recording chart showing the actual 24-hour continuously measured pressure available on the suction and discharge sides of Adair County's existing pump station on Highway 61 near Paxton Road. Identify the 24-hour period recorded, the exact location of the pressure recorder and the sea level elevation of the recorder.
- 27. Provide a pressure recording chart showing the actual 24-hour continuously measured pressure available at Adair County's water storage tank on Highway 80. Identify the 24-hour period recorded, the exact location of the pressure recorder and the sea level elevation of the recorder.
- 28. Provide a pressure recording chart showing the actual 24-hour continuously measured pressure available at Adair County's water storage tank on Highway 55. Identify the 24-hour period recorded, the exact location of the pressure recorder and the sea level elevation of the recorder.
- 29. Provide a pressure recording chart showing the actual 24-hour continuously measured pressure available at Adair County's water storage tank on Gradyville-Butler Road. Identify the 24-hour period recorded, the exact location of the pressure recorder and the sea level elevation of the recorder.
- 30. Provide a pressure recording chart showing the actual 24-hour continuously measured pressure available at Adair County's water storage tank on Highway 61. Identify the 24-hour

period recorded, the exact location of the pressure recorder and the sea level elevation of the recorder.

- 31. Provide narrative description of the proposed daily operational sequences of the water system. Documentation should include the methods and mechanisms proposed to provide positive control of the proposed tank's water level. Narrative description should also include how the proposed tank will "work" (expected inflow and outflow of water and approximate times of day) and how all pumps will function. Any assumptions are to be fully supported by appropriate measurements and hydraulic calculations.
- 32. Provide a list of each of Adair County's water storage tanks. Give the location, capacity, and overflow elevation of each tank. Explain how water is supplied to each tank.
- 33. Provide a list of each of Adair County's existing pump stations. Give the location, number of pumps and their rated capacities, and the purpose of each pump station. Explain how the operation of each pump station is controlled. Provide a copy of the pump manufacturer's characteristic (head/capacity) curve for each of Adair County's existing pumps. Identify each curve as to the particular pump and pump station to which it applies.
- 34. Provide a copy of each of the county court orders establishing the Adair County Water District and defining its boundaries.

- 35. Provide a highway map at a scale of at least one inch equals two miles marked to show Adair County's water distribution system. The map of the system shall show pipeline sizes, locations, and connections as well as pumps, water storage tanks and sea level elevations of key points. The map shall also be marked to show the location of the water district boundaries and labeled to indicate the appropriate court order from which each boundary was determined.
- 36. 807 KAR 5:001 Section 6 provides that a financial exhibit is to be supplied by the applicant for a 12-month period, not ending more than 90 days prior to the application date. To date, this financial exhibit has not been filed. If upon the filing of its 1985 annual report, applicant wishes to incorporate the annual report into this case to meet this requirement, this will be acceptable.
- 37. Applicant has provided a pro forma income statement for the 12-month period ending August 31, 1985, for its test year. Provide this information in the format used in the annual reports by the Commission if possible.
- 38. Provide an amortization schedule for the proposed bond issue. The accrued interest was marked out in Exhibit 5 of the application.
- 39. Provide a specific and complete description of the pro forma adjustments made in the pro forma income statement including all assumptions and calculations, i.e. water purchases, new employee, director's fee, etc.

- 40. On the August 31, 1985, income statement, \$23,496 was included for install meter expense. Provide an explanation as to the nature of this item.
- 41. Provide a breakdown and explanation of the nature of the expense included in professional expenses for the period ending August 31, 1985.
- 42. Provide a depreciation schedule for existing plant and proposed plant.
 - 43. Provide purchase contracts from all water suppliers.
- 44. Provide monthly water purchases and sales for the 12-month period ending August 31, 1985, by supplier.
- 45. Provide expected volume purchases for proposed new customers, by supplier.
- 46. Provide a breakdown by type of revenue of amounts included in miscellaneous service revenues and other operating revenues for the 12-month period ending August 31, 1985.
- 47. Provide a schedule of water usage for 1985 and the calculations for line loss.
- 48. Does the test period depreciation expense include amounts for contributed property? If so, how much?
- 49. Provide calculations for determining revenue requirement.
- 50. In Exhibit 17, Billing Analysis and Proposed Rate Schedule, there is an amount titled Surcharges and other charges.

 (a) What actual charges does this amount represent? (b) Explain

why the surcharge and other charges will increase when the rates are increased. (c) Were these charges approved by the Commission? If so, when?

51. In Exhibit 17, the words "Large Minimums" are used to describe the last block in the rate schedule. (a) What is meant by the words "Large Minimums?" (b) To be considered under this category, what type of usage would a customer have to have?

Done at Frankfort, Kentucky, this 7th day of April, 1986.

PUBLIC SERVICE COMMISSION

Echil D. Henry f.
For the Commission

ATTEST: